



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,206	01/11/2008	Venkatraj Venkatrao Narayanan	F2044(C)	4777

201 7590 02/19/2010
UNILEVER PATENT GROUP
800 SYLVAN AVENUE
AG West S. Wing
ENGLEWOOD CLIFFS, NJ 07632-3100

EXAMINER

MEHTA, HONG T

ART UNIT	PAPER NUMBER
----------	--------------

1794

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

02/19/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentgroupus@unilever.com

Office Action Summary	Application No.		Applicant(s)	
	10/586,206		NARAYANAN ET AL.	
	Examiner		Art Unit	
	HONG MEHTA		1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to applicant's remarks filed on December 3, 2009.

Pending amended claims 1-20 are under examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1-13, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lunder et al. (US 4,410,556) and in view of Pintauro (Soluble Tea Production Process, 1970) and Ganesan et al. (WO 01/70038 A2).**

5. **Regarding claims 1, 2, 10, 13, 19 and 20**, Lunder et al. discloses a process for preparing powdered tea extract (col. 1, lines 6-9) comprising the steps of contacting black tea (col. 1, lines 42-44; Example 1, line 60; Example 6, line 35; Example 7, line 50) with an aqueous medium comprising carboxylic acid (col. 1, lines 52-68), including ascorbic acid (col. 2, lines 15-18) for a period of 1 minute to 2 hours, preferably 5 minutes to 1 hour (col. 2, lines 30-35) and drying (col. 2, lines 51-68) to produce spray-dried tea extract powder to be soluble in cold water (col. 3, lines 53-55).

6. Lunder et al. discloses black tea as raw material in the extraction process. Lunder et al. is silent on the pre-treatment of black tea. However, Pintauro clearly teaches the conventional process of black tea comprising the treatment of withering, macerating, fermenting and firing of fresh tea leaves to obtain black tea (pg. 3-12, 15). It would have been obvious to one of ordinary skill in the art to combine Pintauro's treatment of black tea with Lunder's process because Pintauro's tea processing treatment of black tea is a well known practice of obtaining fermented black tea from fresh plucked green tea leaves. Lunder's black tea is considered to have all the pre-treatment process limitation of withering, macerating, fermenting and firing in black tea product.

7. Lunder et al. does not disclose an oxidizing agent in the aqueous medium. However, Ganesan et al. discloses a process for manufacturing black leaf tea that is

Art Unit: 1794

infusible in hot or cold water (Abstract). Ganesan et al. discloses contacting black tea with ascorbic acid or their salts (pg. 5, lines 20-25; pg. 7, lines 5-14) and oxidative agent, hydrogen peroxide (pg. 6, lines 11-20) in aqueous solution (pg. 6, lines 3-7) and drying tea product that is water infusible at temperature ranges of 5°C to 100°C (pg. 6, lines 25-35). It would have been obvious to one of ordinary skill in the art to use Ganesan's oxidative agent in Lunder's process of preparing powdered tea extract as the addition of oxidizing agent is known in the tea industry to control fermentation with the addition of oxidizing agents to produce a desired quality of fermented tea product. It would have been obvious to one of ordinary skill in the art to use the Ganesan's oxidative agent in Lunder's process to produce a high quality of fermented soluble tea product.

8. **Regarding claim 3**, Ganesan et al. discloses ascorbic acid and its salts as solubilising compound (pg. 5, lines 20-25) in the amount range of 0.5% to 10% by weight of tea (pg. 6, lines 4-7).

9. **Regarding claim 4**, Lunder et al. discloses amount up to 2% of ascorbic acid by weight of tea leaves (col. 2, lines 15-19).

10. **Regarding claims 5, 6, 7, and 8**, Ganesan et al. discloses oxidative agents, hydrogen peroxide at concentration ranging from 0.01% to 1% by weight of black tea (pg. 6, lines 16-20). Ganesan et al. and the claims differ in that amount of oxidative agent's percentages and incubation time does not teach the exact same proportions as recited in the instant claims.

Art Unit: 1794

11. The claims are anticipated for the claimed ranges that overlap the amounts taught in the prior art. However for the claimed ranges that do not overlap, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Ganesan et al. overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness (see MPEP 2144.05.) It would have been obvious to one ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", *In re Peterson* 65 USPQ2d 1379 (CAFC 2003).

12. **Regarding claims 9 and 11**, Ganesan et al. discloses the addition of oxidative agents (pg. 6, lines 11-14) along with the ascorbic acids and at 10°C to 60°C (pg.6, lines 9-10).

13. **Regarding claim 12**, Ganesan et al. discloses tea can dried with a moisture content of less than 5% (pg. 6, lines 21-22).

14. **Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Lunder et al. (US 4,410,556), Pintauro (Soluble Tea Production Process, 1970) and Ganesan et al. (WO 01/70038 A2) as applied to claim 1 above, and further in view of (JP 47-049719 Abstract).**

15. Lunder et al., Pintauro, and Ganesan et al. disclose the claimed invention as discussed above. Lunder et al. discloses the addition of ingredients to tea preparation (col. 3, lines 45-51). Lunder does not disclose contacting amino acid with the black tea prior to drying.

16. However, JP 47-049719 discloses amino acid including phenylalanine to be added to tea prior to heating process (Abstract). It would have been obvious to one of ordinary skill in the art to employ the amino acids additive of JP 47-049719 in Lunder's tea product. The addition of JP 47-049719's amino acids, phenylalanine improves on the natural tea flavor without imparting bitter after taste. It would have been obvious to one of ordinary skill in the art to combine JP 47-049719's amino acids with Lunder's tea product contributing to overall quality flavor of tea beverage.

17. **Claims 15-17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Lunder et al. (US 4,410,556), Pintauro (Soluble Tea Production Process, 1970), Ganesan et al. (WO 01/70038 A2) and (JP 47-049719 Abstract) as applied to claim 14 above, and further in view Maena et al. (JP 02-128669).**

18. Lunder et al., Pintauro, Ganesan et al. and JP 47-04919 discloses the claimed invention as discussed in claim 14.

19. JP 47-049719 discloses amino acid including phenylalanine to tea prior to heating process (Abstract). JP 47-049719 does not disclose the recited ranges of amino acids. However Maena et al. discloses the usage level of amino acid in drinkable food composition in the amount of 0.1% to 60.0% wt. (Abstract). It would

have been obvious to one of ordinary skill in the art to employ the amino acid additive of JP 47-049719 and Maena et al.'s amino acid's amount range in Lunder's process of making a tea product to improve flavor without bitter after taste. It would have been obvious to one of ordinary skill in the art to combine JP 47-04919 and Maena et al. in Lunder's process of making tea product contributing to the overall quality flavor of tea beverage composition without bitterness.

Response to Arguments

20. Applicant's arguments with respect to claim 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HONG MEHTA whose telephone number is (571)270-7093. The examiner can normally be reached on Monday thru Thursday, from 7:30 am to 4:30 pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Htm

/Jennifer McNeil/

Supervisory Patent Examiner, Art Unit 1794